Changing Rod Stories to Number Sentences

Materials

Cuisenaire Rods for each student
Paper and pencil for each student
Changing Rod Stories to Number Sentences Worksheet, page 139

Settings

A small group led by the teacher
A whole class led by the teacher

Learning Experience

Ask students to make a train with a red rod and a green rod. Ask them to find the single rod that matches and to write the plus story for the rod triple.

R + G = Y

Direct students to cover each rod with white rods. Now ask them to describe the rod situation in terms of white rods:
"2 white rods plus 3 white rods equals 5 white rods."

This rod triple can be written in an addition sentence with numerals, assuming a white rod represents 1.

2 + 3 = 5

The distinction is made in this development between a plus story, which describes the situation with rods, and a number sentence, which uses numerals to interpret the rod lengths in terms of white rods.

The worksheet on page 139 gives students practice going from a rod story to a number sentence. Coloring the rod lengths on the centimeter strips reinforces the relationship of each rod length to white rods.

Solutions

Changing Rod Stories to Number Sentences Worksheet (p. 139)

1) green, red, yellow	3 + 2 = 5
2) dark green, green, blue	6 + 3 = 9
3) brown, white, blue	8 + 1 = 9
4) black, green, orange	7 + 3 = 10
5) white, blue, orange	1 + 9 = 10
6) purple, purple, brown	4 + 4 = 8

Underlying Mathematics Related to the NCTM Standards:

Recognition of equivalences of lengths
Representation of lengths in terms of white rods
Association of sums with addends
Association of numbers with rods
Use of equal sign
Meaning of addition
Use of addition sentences
Use of the terms *rod triple* and *triple of rods*